

**HP 3000 Computer Systems**

**SERIES 40/44 COMPUTER  
30079A ADD-ON**

**Installation Manual**



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Second Edition.....Jan 1983

Effective Pages

Date

ALL.....JAN 1983

# PRINTING HISTORY

New editions are complete revisions of the manual. Update packages, which are issued between editions, contain additional and replacement pages to be merged into the manual by the customer. The date on the title page and back cover of the manual changes only when a new edition is published. When an edition is reprinted, all the prior updates to the edition are incorporated. No information is incorporated into a reprinting unless it appears as a prior update. The edition does not change.

First Edition.....MAR 1981  
Second Edition.....JAN 1983

# INTRODUCTION AND PROCEDURE

## INTRODUCTION

Contact your local Hewlett-Packard field service office to arrange for the installation of this product. Have the system operator back-up the system as described in the Console Operators Guide.

This manual contains the procedures for installing an HP 30079A General Interface Controller (GIC) in a functional, installed HP 3000 Series 40/44 computer system. The procedure is intended for use by Hewlett-Packard Customer Engineers trained on HP Series 40/44 computer systems.

This product, used to add a GIC to an HP Series 40/44 computer, consists of the following parts:

### For HP 3000/44 Systems

|             |           |
|-------------|-----------|
| 31262-60001 | GIC PCA   |
| 5061-2503   | GIC CABLE |

### For HP 3000/40 Systems

|             |           |
|-------------|-----------|
| 31262-60001 | GIC PCA   |
| 30080-60026 | GIC CABLE |

## PROCEDURE

- a. The system should be backed up by the system operator prior to beginning the installation.
- b. Turn the Processor Power Switch to OFF (see figure 1).
- c. Install the new GIC PCA (p/n 31262-60001) in next available GIC card cage slot. GIC's must be installed in the following channel and slot number order: (see figure 2.)

For Series 44:

Channel 11 in slot 16  
Channels 9, 10, 13 in slots 22 thru 24 respectively  
Channel 12 in slot E7 of 2nd card cage

For Series 40

Channel 11 in slot 15  
Channel 9 in slot 9  
Channel 10 in slot 19  
Channel 13 in slot 25

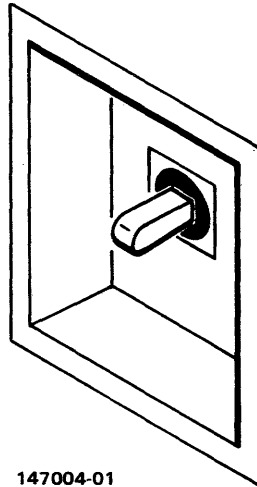
- d. For Series 44, route the HP-IB GIC cable from the next available side or rear junction panel position to the GIC PCA.

For Series 40, route the HP-IB GIC cable down to the bottom of the cabinet and ground it to the bottom edge of the cabinet.

- e. Select channel number on GIC PCA according to Configuration Matrix. Refer to table 1.
- f. Connect the desired device to the new channel and select its HP-IB device address according to the configuration matrix.
- g. Turn the processor power Switch to ON, run I/O MAP and GIC diagnostic. Refer to Diagnostic Manual Set (p/n 30070-60068).
- h. Run appropriate standalone diagnostics, self tests and/or Sleuthsm verifier programs on any new peripherals.
- i. Cold Start the system from the back-up media, configuring the new channel and device(s) on the system. Refer to "Functions of the Console Operator" in the Console Operators Guide, if required.

|             |
|-------------|
| <b>NOTE</b> |
|-------------|

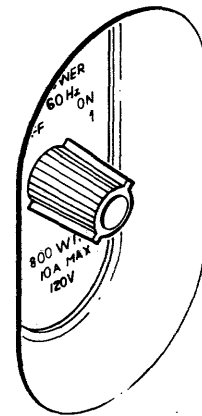
Use previously installed GICs as a model for cable routings and connections.



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SERIES 44

NOTE:  
WHEN POWER SWITCH  
IS IN THE UP POSITION,  
SYSTEM POWER IS ON.



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SERIES 40

Figure 1. Processor Power Switch

| CARD CAGE 1 |                          |
|-------------|--------------------------|
| SLOT NO.    |                          |
| 1           | MEMORY ARRAY 0           |
| 2           | MEMORY ARRAY 1           |
| 3           | MEMORY ARRAY 2           |
| 4           | MEMORY ARRAY 3           |
| 5           | MEMORY ARRAY 4           |
| 6           | MEMORY ARRAY 5           |
| 7           | MEMORY ARRAY 6           |
| 8           | MEMORY ARRAY 7           |
| 9           | MEMORY CONTROL & LOGGING |
| 10          | CMP                      |
| 11          | CTL                      |
| 12          | ALU                      |
| 13          | PCS                      |
| 14          | ADCC (M) (CH 1)          |
| 15          | ADCC (E)                 |
| 16          | GIC (CH 11)              |
| 17          | ADCC (M) / INP / PTR     |
| 18          | ADCC (E) / INP / PTR     |
| 19          | ADCC (M) / INP           |
| 20          | ADCC (E)                 |
| 21          | ADCC (M)                 |
| 22          | ADCC / GIC               |
| 23          | ADCC (M) / GIC           |
| 24          | GIC                      |

| CARD CAGE 2 |                          |
|-------------|--------------------------|
| SLOT NO.    |                          |
| 1           | ADCC (E)                 |
| 2           | ADCC (M) (CH 4)          |
| 3           | ADCC (E)                 |
| 4           | ADCC (M) (CH 3)          |
| 5           | ADCC (E)                 |
| 6           | ADCC (M) (CH 2)          |
| 7           | GIC (CH 12)              |
| 8           | MEMORY CONTROL & LOGGING |
| 9           | MEMORY ARRAY 7           |
| 10          | MEMORY ARRAY 6           |
| 11          | MEMORY ARRAY 5           |
| 12          | MEMORY ARRAY 4           |
| 13          | MEMORY ARRAY 3           |
| 14          | MEMORY ARRAY 2           |
| 15          | MEMORY ARRAY 1           |
| 16          | MEMORY ARRAY 0           |
| 17          | INP                      |
| 18          | INP                      |
| 19          | INP                      |
| 20          | INP                      |
| 21          | PTR                      |
| 22          | PTR                      |
| 23          | PTR                      |
| 24          | PTR                      |

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Figure 2. Series 44 Slot Locations (maximum configuration)

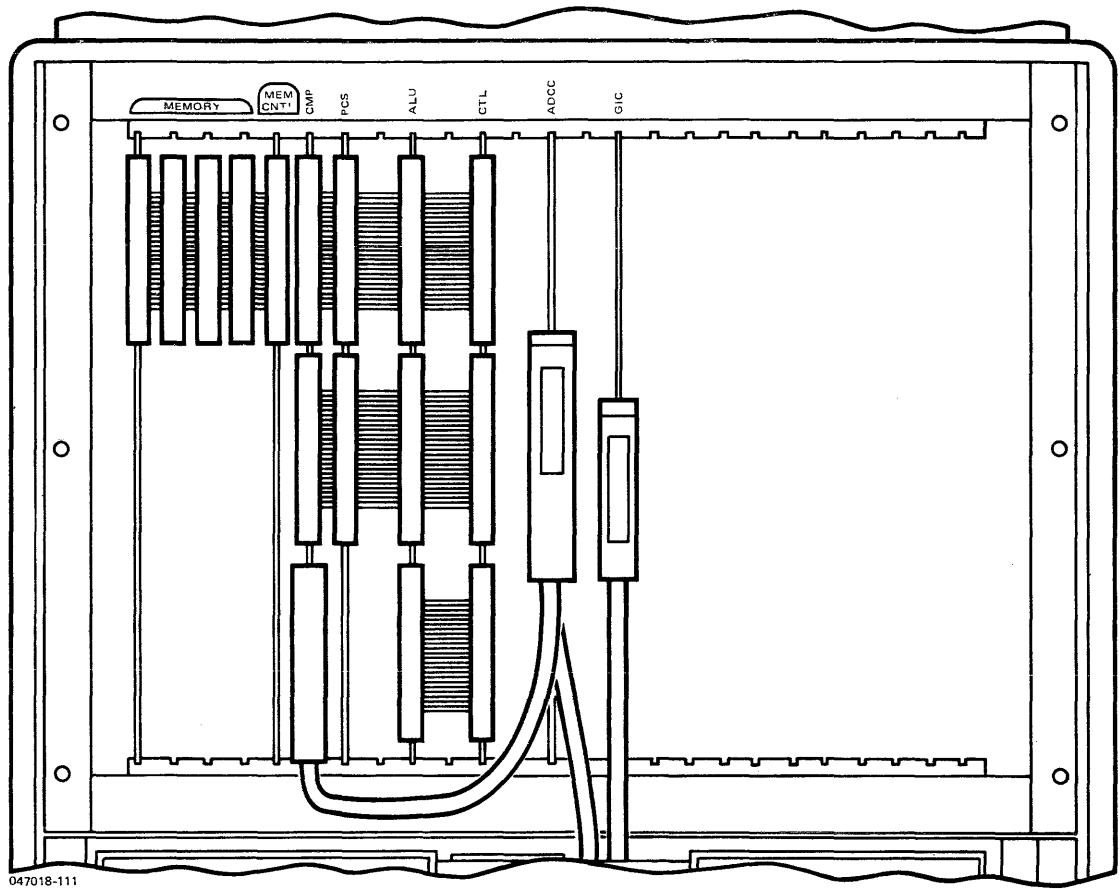


Figure 3. Series 40 Slot locations

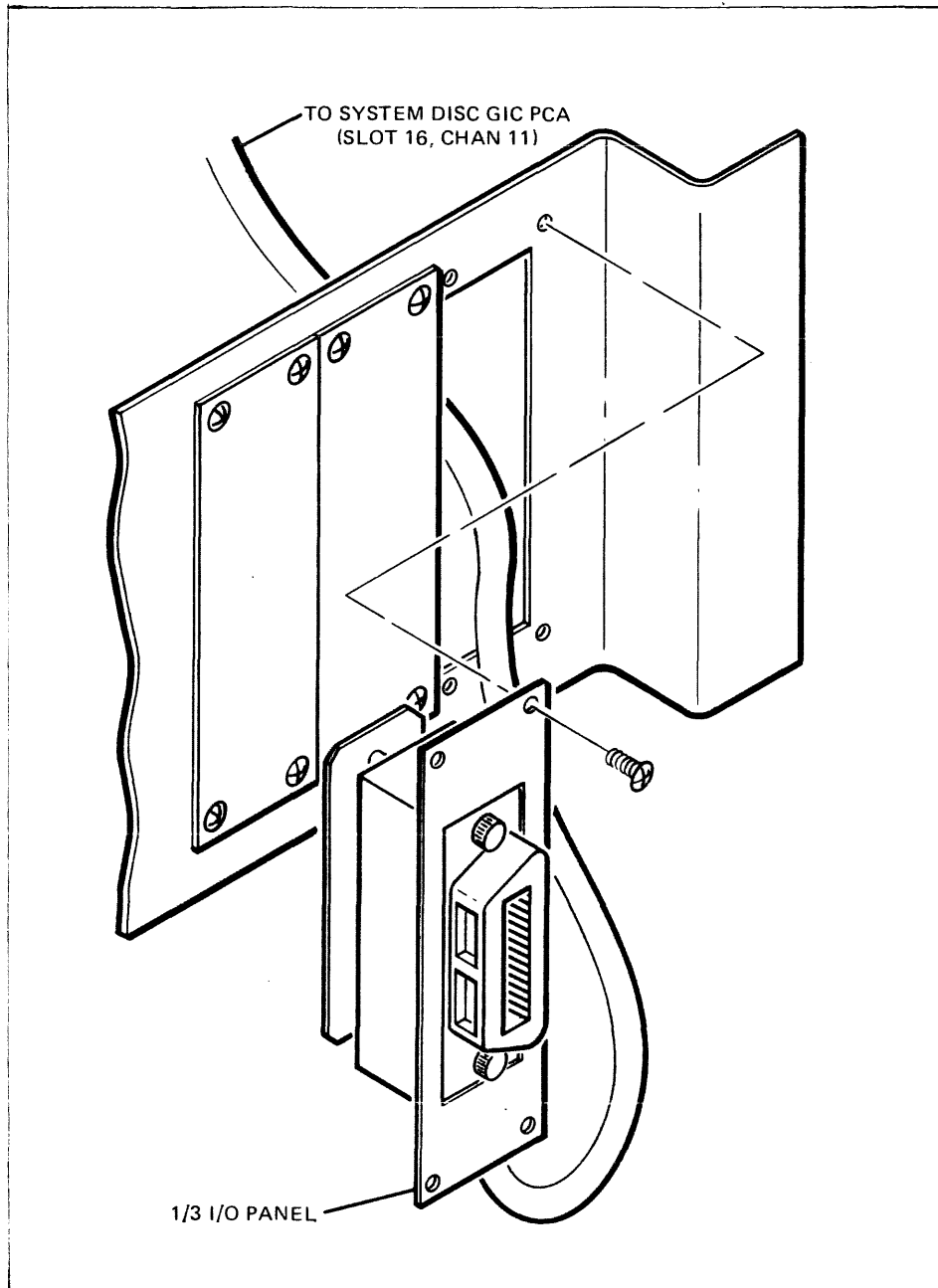


Figure 4. Series 44 Rear Junction Panel

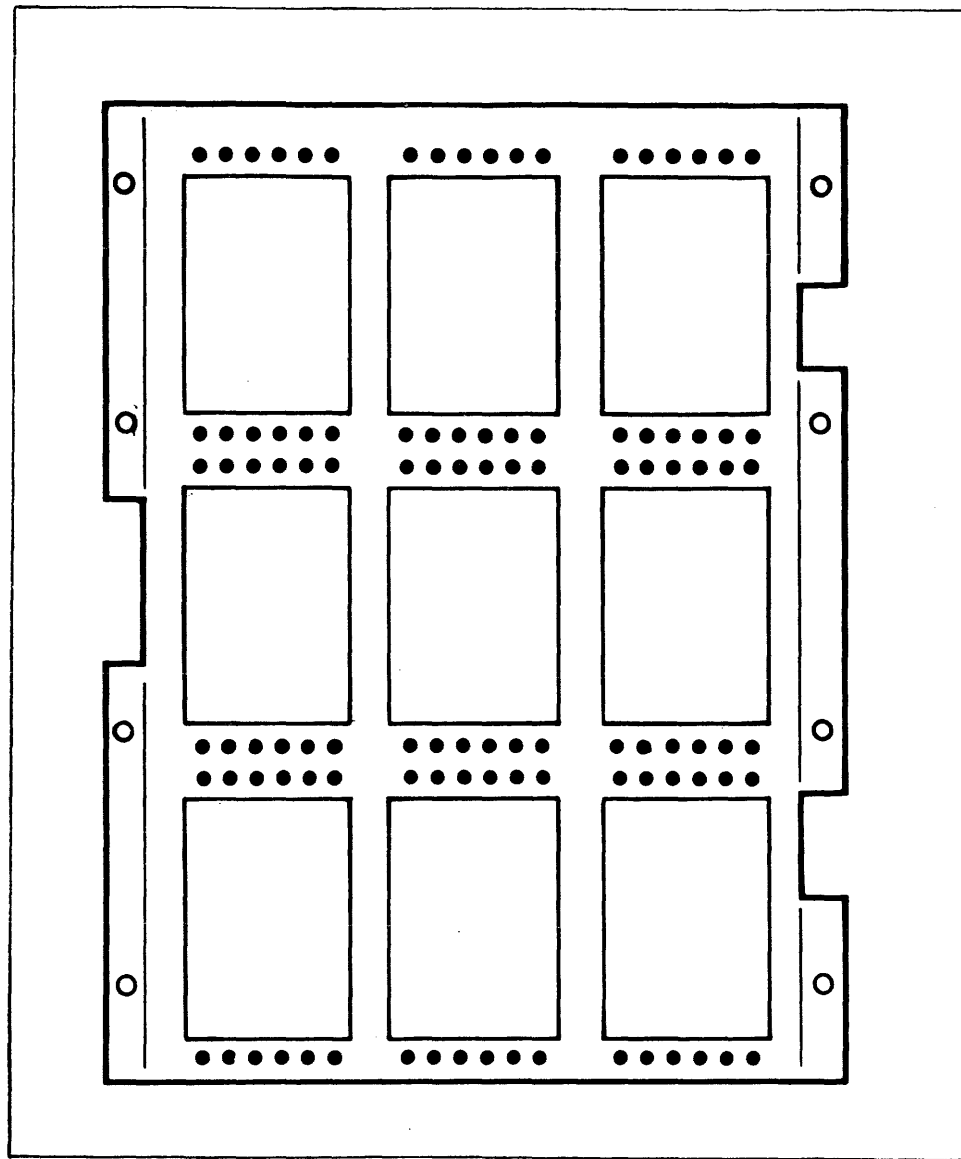


Figure 5. Series 44 Side Junction Panel

| TYPE<br>PTR   | TYPE<br>PTR   | TYPE<br>PTR   |
|---------------|---------------|---------------|
| SLOT          | SLOT          | SLOT          |
| CHNL<br>11/12 | CHNL<br>11/12 | CHNL<br>11/12 |
| DEV<br>RANGE  | DEV<br>RANGE  | DEV<br>RANGE  |
|               |               |               |

| TYPE<br>PTR   | TYPE<br>GIC       | TYPE<br>INP/GIC |
|---------------|-------------------|-----------------|
| SLOT          | SLOT              | SLOT            |
| CHNL<br>11/12 | CHNL<br>12/13     | CHNL<br>11/12   |
| DEV<br>RANGE  | DEV<br>RANGE<br>0 | DEV<br>RANGE    |
|               |                   |                 |
|               |                   |                 |

| TYPE<br>INP  | TYPE<br>INP  | TYPE<br>INP  |
|--------------|--------------|--------------|
| SLOT         | SLOT         | SLOT         |
| CHNL<br>12   | CHNL<br>12   | CHNL<br>12   |
| DEV<br>RANGE | DEV<br>RANGE | DEV<br>RANGE |
|              |              |              |

| TYPE<br>ADCC<br>(MAIN) | TYPE<br>—         | TYPE<br>ADCC<br>(EXT) |
|------------------------|-------------------|-----------------------|
| SLOT                   | SLOT              | SLOT                  |
| CHNL<br>2              | CHNL<br>—         | CHNL<br>2             |
| DEV<br>RANGE<br>0      | DEV<br>RANGE<br>— | DEV<br>RANGE<br>4     |
|                        |                   |                       |
| 3                      | —                 | 7                     |

| TYPE<br>ADCC<br>(MAIN) | TYPE<br>—         | TYPE<br>ADCC<br>(EXT) |
|------------------------|-------------------|-----------------------|
| SLOT                   | SLOT              | SLOT                  |
| CHNL<br>3              | CHNL<br>—         | CHNL<br>3             |
| DEV<br>RANGE<br>0      | DEV<br>RANGE<br>— | DEV<br>RANGE<br>4     |
|                        |                   |                       |
| 3                      | —                 | 7                     |

| TYPE<br>ADCC<br>(MAIN) | TYPE<br>—         | TYPE<br>ADCC<br>(EXT) |
|------------------------|-------------------|-----------------------|
| SLOT                   | SLOT              | SLOT                  |
| CHNL<br>4              | CHNL<br>—         | CHNL<br>4             |
| DEV<br>RANGE<br>0      | DEV<br>RANGE<br>— | DEV<br>RANGE<br>4     |
|                        |                   |                       |
| 3                      | —                 | 7                     |

| TYPE<br>ADCC<br>(MAIN) | TYPE<br>—         | TYPE<br>ADCC<br>(EXT) |
|------------------------|-------------------|-----------------------|
| SLOT                   | SLOT              | SLOT                  |
| CHNL<br>5              | CHNL<br>—         | CHNL<br>5             |
| DEV<br>RANGE<br>0      | DEV<br>RANGE<br>— | DEV<br>RANGE<br>4     |
|                        |                   |                       |
| 3                      | —                 | 7                     |

| TYPE<br>ADCC<br>(MAIN) | TYPE<br>—         | TYPE<br>ADCC<br>(EXT) |
|------------------------|-------------------|-----------------------|
| SLOT                   | SLOT              | SLOT                  |
| CHNL<br>6              | CHNL<br>—         | CHNL<br>6             |
| DEV<br>RANGE           | DEV<br>RANGE<br>— | DEV<br>RANGE<br>4     |
|                        |                   |                       |
| 3                      | —                 | 7                     |

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Figure 6. Series 44 Side Junction Panel Identification Chart

| TYPE<br>CMP/<br>ADCC | TYPE<br>—         | TYPE<br>ADCC<br>(EXT) |
|----------------------|-------------------|-----------------------|
| SLOT<br>14           | SLOT<br>—         | SLOT<br>15            |
| CHNL<br>1            | CHNL<br>—         | CHNL<br>1             |
| DEV<br>RANGE<br>0    | DEV<br>RANGE<br>— | DEV<br>RANGE<br>4     |
|                      |                   |                       |
| 3                    | —                 | 7                     |

| TYPE<br>ADCC<br>(MAIN) | TYPE<br>—         | TYPE<br>ADCC<br>(EXT) |
|------------------------|-------------------|-----------------------|
| SLOT                   | SLOT              | SLOT                  |
| CHNL<br>7              | CHNL<br>—         | CHNL<br>7             |
| DEV<br>RANGE<br>0      | DEV<br>RANGE<br>— | DEV<br>RANGE<br>4     |
|                        |                   |                       |
| 3                      | —                 | 7                     |

| TYPE<br>INP   | TYPE<br>INP   | TYPE<br>INP   |
|---------------|---------------|---------------|
| SLOT          | SLOT          | SLOT          |
| CHNL<br>11/12 | CHNL<br>11/12 | CHNL<br>11/12 |
| DEV<br>RANGE  | DEV<br>RANGE  | DEV<br>RANGE  |
|               |               |               |

| TYPE<br>GIC       | TYPE<br>GIC       | TYPE<br>GIC       |
|-------------------|-------------------|-------------------|
| SLOT              | SLOT              | SLOT<br>16        |
| CHNL<br>9         | CHNL<br>10        | CHNL<br>11        |
| DEV<br>RANGE<br>0 | DEV<br>RANGE<br>0 | DEV<br>RANGE<br>0 |
|                   |                   |                   |
| 7                 | 7                 | 7                 |

047022-07

Figure 7. Series 44 Rear Junction Panel Identification Chart

Table 1. Suggested System Configuration Matrix

| Device Type              | Channel No. | Device No. |
|--------------------------|-------------|------------|
| Tape Drives (1 thru 4)   | 9           | 1          |
| Tape Drives (5 thru 8)   | 10          | 1          |
| System Disc Controller   | 11          | 0,1        |
| Line Printers            | 11          | 2 thru 4   |
| INP's                    | 11          | 5 thru 7   |
| Flexible Disc Drive      | 12          | 0          |
| Additional Line Printers | 12          | 0 thru 3   |
| Additional INP's         | 12          | 4 thru 7   |
| HP 2608A printer         | 13          | 1          |

Table 2. GIC Configuration Restrictions

|            |                                                                                   |
|------------|-----------------------------------------------------------------------------------|
| Channel 9  | One tape drive master only                                                        |
| Channel 10 | One tape drive master only                                                        |
| Channel 11 | Disc drives and internal peripherals only                                         |
| Channel 12 | No disc drives, three external peripherals only, up to eight internal peripherals |
| Channel 13 | One 2680A laser printer only                                                      |

**NOTE**

Maximum possible GICs on Series 40 is four.